

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
18 November 2004 (18.11.2004)

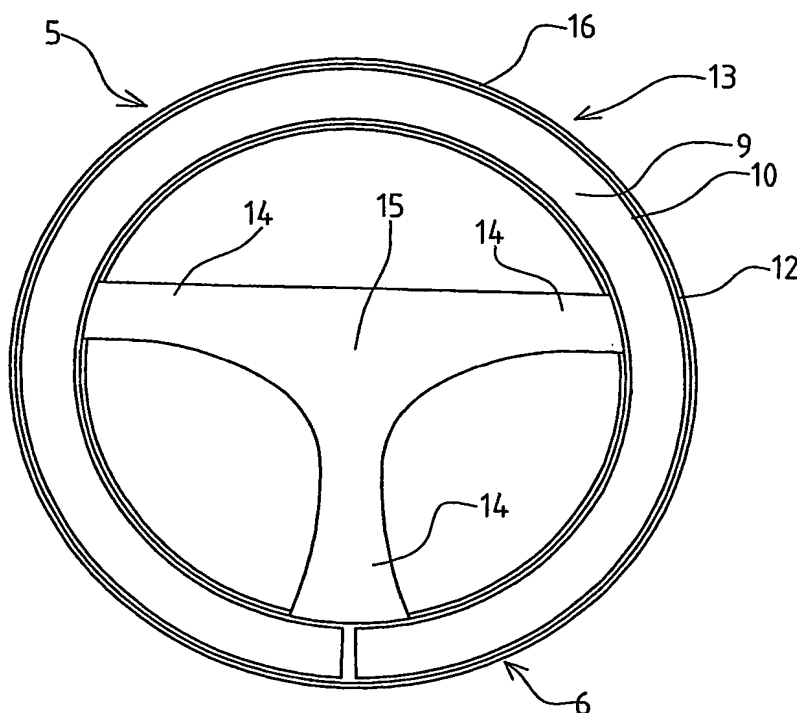
PCT

(10) International Publication Number  
**WO 2004/098979 A1**

- (51) International Patent Classification<sup>7</sup>: **B62D 1/06 //** F28D 15/02
- (21) International Application Number: PCT/SE2004/000642
- (22) International Filing Date: 28 April 2004 (28.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 0310866.9 12 May 2003 (12.05.2003) GB
- (71) Applicant (for all designated States except US): **AUTO-LIV DEVELOPMENT AB** [SE/SE]; S-447 83 Vårgårda (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **TARTE, Frédéric** [FR/FR]; 7, allée du Terroir, F-86580 Biard (FR). **LEMASSON, Pascal** [FR/FR]; 22 Route de la croix Girault, F-86000 St Georges les Baillargeaux (FR).
- (74) Agent: **MEULLER, Erik**; Autoliv Development AB, S-447 83 Vårgårda (SE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: A STEERING WHEEL



(57) Abstract: A steering wheel is disclosed which has a central hub (15) which is connected by at least one spoke (14) to a rim (13). At least one heat pipe (9) is provided which is thermally isolated from any external cooling arrangement and is configured to transfer heat from a first region (5) of the rim (13) to another region (6) of the rim (13) solely under its own function. The heat pipe (9) is preferably provided extending around the rim (13).



**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*